

IN THE CLAIMS:

23. (currently amended) A method of treating an individual for a condition selected from the group consisting of exposure to DNA damaging agents, abnormal cell proliferation characteristic of psoriasis, atherosclerosis, cancer, ~~and~~ arterial restenosis, and undesirable immune response accompanying rejection of a transplant ~~and~~ or an autoimmune disease, comprising administering to the patient a pharmaceutical composition comprising a peptide having at least four sequential amino acids from a negative regulatory region which maps to residues 361-383 (SEQ. ID. No. 12) of p53, said peptide not being a subfragment of human p53, wherein said peptide activates DNA binding of wild-type p53 or a p 53 mutant containing a single amino acid substitution, said mutant selected from the group consisting of p53-ser²³⁹, p53-his²⁷³, p53-gln²⁴⁸, p53-trp²⁸², and p53-cys²⁷³, in a p53 DNA binding assay and a pharmaceutically acceptable carrier.

24. (currently amended) A method for treating a patient having a tumor expressing a p53 mutant whose ability to bind DNA may be activated by peptides, modified peptides or peptidomimetics corresponding to all or a portion of the negative regulatory region which maps to residues 361-383 of p53, said method comprising administering to said patient a pharmaceutical composition comprising a peptide having at least four sequential amino acids from a negative regulatory region which maps to residues 361-383 (SEQ. ID. No. 12) of p53, said peptide not being a subfragment of human p53, wherein said peptide activates DNA binding of wild-type p53 or a p 53 mutant containing a single amino acid substitution, said mutant selected from the group consisting of p53-ser²³⁹, p53-his²⁷³, p53-gln²⁴⁸, p53-trp²⁸², and p53-cys²⁷³, in a p53 DNA binding assay and a pharmaceutically acceptable carrier.

25. (original) The method of claim 24, wherein said p53 mutant is selected from the group consisting of p53-ser²³⁹, p53-his²⁷³, p53-gln²⁴⁸, p53-trp²⁸², and p53-cys²⁷³.

26. (original) The method of claim 24, wherein said ability to bind DNA is determined by missing a example from the tumor of said patient containing a p53 mutant protein with a peptide, modified peptide or peptidomimetic corresponding to all or a portion of said negative regulatory region, and measuring the ability of the mixture to bind DNA in a p53 DNA binding assay.

27. (new) A method of activating DNA binding activity of a p53 polypeptide comprising:

administering a composition comprising a peptide having at least four sequential amino acids from a negative regulatory region which maps to residues 361-383 (SEQ. ID. No. 12) of p53, said peptide not being a subfragment of human p53, wherein said peptide is capable of activating DNA binding of wild-type p53 or a p53 mutant containing a single amino acid substitution, said mutant selected from the group consisting of p53-ser²³⁹, p53-his²⁷³, p53-gln²⁴⁸, p53-trp²⁸², and p53-cys²⁷³, in a p53 DNA biding assay, and wherein said composition activates DNA binding activity of the p53 polypeptide.

28. (new) The method of claim 27, wherein said p53 mutant is selected from the group consisting of p53-ser²³⁹, p53-his²⁷³, p53-gln²⁴⁸, p53-trp²⁸², and p53-cys²⁷³.

29. (new) The method of claim 27, wherein said capability of activating DNA binding is determined by missing a example from the tumor of said patient containing a p53 mutant protein with a peptide, modified peptide or peptidomimetic corresponding to all or a portion of said negative regulatory region, and measuring the ability of the mixture to bind DNA in a p53 DNA binding assay.